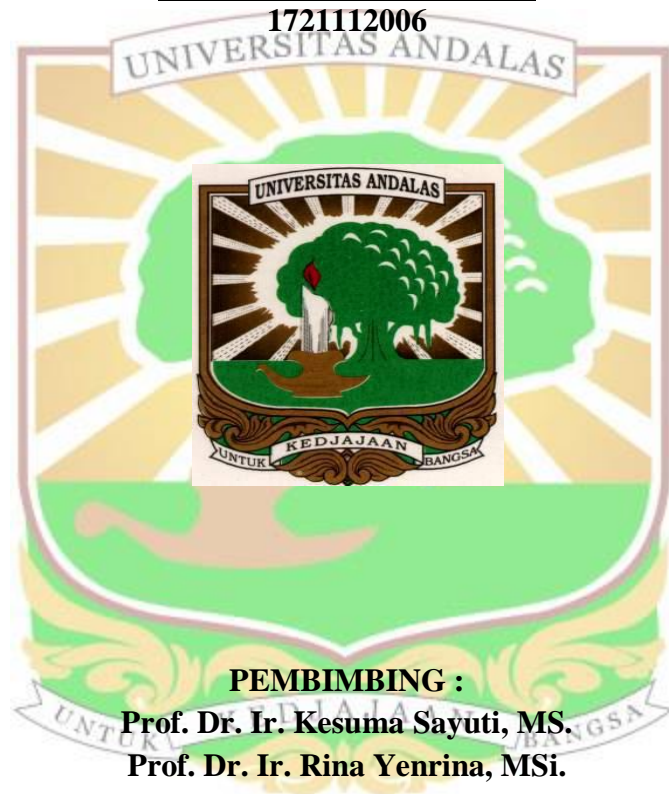


**PENGARUH PENGOLAHAN TERHADAP KADAR PURIN BEBERAPA
MAKANAN OLAHAN BERBAHAN BAKU HEWANI DI SUMATERA
BARAT**

TESIS

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Abstrak

Purin merupakan basa nitrogen dalam DNA dan RNA yang memiliki struktur cincin heterosiklik. Produk akhir dari metabolisme purin adalah asam urat. Makanan yang dikonsumsi merupakan sumber utama purin dalam tubuh. Pada umumnya makanan yang mengandung protein tinggi dapat mengakibatkan meningkatnya asupan purin dan menyebabkan kadar asam urat dalam darah berlebih. Makanan di Sumatera Barat terkenal sebagai masakan yang menggunakan berbagai macam bahan baku dan kaya akan rempah – rempah. Diantara makanan sumatera barat yang terkenal luas mengandung protein tinggi berbahan baku hewani yaitu yang berasal dari sapi, ayam dan ikan. Proses pengolahan diduga dapat mempengaruhi kadar purin dalam makanan. Penelitian ini bertujuan untuk mengetahui proses pengolahan makanan olahan berbahan baku hewani di Sumatera Barat, mengidentifikasi kadar purin (adenine, guanine, hypoxanthine dan xanthine) pada beberapa makanan olahan berbahan baku hewani di Sumatera Barat dan mengetahui proses pengolahan yang menaikkan atau menurunkan kadar purin dalam makanan berbahan baku hewani di Sumatera Barat.

Pelaksanaan penelitian ini terdiri dari dua tahap, tahap I menggunakan metode survei pada beberapa rumah makan untuk mendapatkan informasi mengenai proses pengolahan serta bahan makanan berbahan baku hewani. Pada tahap kedua yang menggunakan metode *deskriptif eksploratif* berupa analisis kadar air dan kandungan purin dari makanan berbahan baku hewani di Sumatera Barat. Analisis kadar air menggunakan metode gravimetric dan analisis kadar purin dengan HPLC.

Hasil penelitian ini menunjukkan proses pengolahan makanan berbahan baku hewani di Sumatera Barat umumnya menggunakan metode menggulai (*stewing*), menggoreng (*frying*) dan membakar (*grilling*). Metode pengolahan menggoreng (*frying*) meningkatkan kadar purin dalam makanan sedangkan metode pengolahan membakar (*grilling*) menurunkan kadar purin dalam makanan. Ikan goreng balado memiliki kadar purin tertinggi dari yang lainnya. Kadar adenine ikan balado 7,96 mg/100g, xanthine 3,04 mg/100g, hypoxanthine 479,53 mg/100g sehingga total purin dalam ikan balado yaitu 490,53 mg/100g. Sedangkan ayam bakar memiliki total purin terendah dibandingkan dengan makanan lainnya. Ayam bakar memiliki kadar adenine sebesar 34,85 mg/100g sehingga total purin pada ayam bakar yaitu 34,85 mg/100g.

Kata kunci :, Makanan Olahan, Hewani, Pengolahan, Purin, Adenine, Guanine, Hypoxanthine, Xanthine

THE EFFECT OF PROCESSING ON THE PURIN LEVEL OF SOME PROCESSED FOODS WITH ANIMAL RAW MATERIALS IN WEST SUMATRA

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Abstract

Purines are nitrogenous bases in DNA and RNA that have a heterocyclic ring structure. The final product of purine metabolism is uric acid. Food consumption is the main source of purines in the body. In general, foods that contain high protein can result in increased intake of purines and cause excessive levels of uric acid in the blood. Food in West Sumatra is famous as a cuisine that uses a variety of raw materials and rich in spices. Among the foods of West Sumatra, which are widely known for their high protein content, they are made from animal origin, originating from cows, chickens and fish. Food processing can affect levels of purines in food. This study aims to determine the processing of foods made from animal raw materials in West Sumatra, identify levels of purines (adenine, guanine, hypoxanthine and xanthine) on several processed foods made from animal raw materials in West Sumatra and to know the food processing that increase or decrease levels of purines in food made from animal raw materials in West Sumatra.

The implementation of this research consisted of two stages, stage I used a survey method in several restaurants to obtain information about the processing and food ingredients made from animal raw materials. In the second stage, an explorative descriptive method is used to analyze the water content and purine content of animal-based foods in West Sumatra. Water content analysis using gravimetric method and purine content analysis by HPLC.

The results of this study indicate that animal-based food processing in West Sumatra generally uses the method of stewing, frying and grilling. The frying method increases the purine content in the food, while the grilling method decreases the purine content in the food. Balado fried fish has the highest purine content than the others. The adenine content of balado fish is 7.96 mg / 100g, xanthine 3.04 mg / 100g, hypoxanthine 479.53 mg / 100g so that the total purine in balado fish is 490.53 mg / 100g. Meanwhile, grilled chicken has the lowest total purine compared to other foods. Grilled chicken has an adenine content of 34.85 mg / 100g so that the total purine in grilled chicken is 34.85 mg / 100g.

Keywords: *Processed Foods, Animal, Processing, Purines, Adenine, Guanine, Hypoxanthine, Xanthine*